

**MATERIALS LICENSE**

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

<p style="text-align: center;">Licensee</p> <p>1. <b>Q Squared Solutions BioSciences, LLC</b></p> <p>2. 5225 Exploration Drive Indianapolis, Indiana 46241</p>	<p>In accordance with letter dated <b>July 9, 2015</b>,</p> <p>3. License No. 13-32830-01 is amended in its entirety to read as follows:</p> <hr/> <p>4. Expiration Date: <b>September 30, 2021</b></p> <hr/> <p>5. Docket No. <b>030-38468</b> Reference No.</p>
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<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Carbon-14</p> <p>B. Hydrogen-3</p>	<p>7. Chemical and/or physical form</p> <p>A. Any</p> <p>B. Any</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A. 80 millicuries</p> <p>B. 80 millicuries</p>
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9. Authorized Use:

A. and B. For use in conducting metabolism studies.

CONDITIONS

- 10. Licensed material shall be used or stored only at the licensee's facilities located at 5225 Exploration Drive, Indianapolis, Indiana.
- 11. A. Licensed material shall be used by, or under the supervision of, Shelby R. Anderson, Ph.D., and Richard D. Burton, Ph.D.
- B. The Radiation Safety Officer (RSO) for this license is Shane M. Lowery.
- 12. Licensed material shall not be used in or on humans except as provided otherwise by specific condition of this license.
- 13. The licensee shall not use licensed material in field applications where activity is release except as provided otherwise by specific condition of this license.
- 14. The licensee shall conduct a physical inventory every six months, or at other intervals approved by the U. S. Nuclear Regulatory Commission, to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for five years from the date of each inventory, and shall include the radionuclides, quantities, manufacturer's name and model numbers, and the date of the inventory.


**MATERIALS LICENSE  
SUPPLEMENTARY SHEET**License No.  
13-32830-01Docket or Reference No.  
030-38468**Amendment No. 06**

15. Experimental animals, or the products from experimental animals, that have been administered licensed materials shall not be used for human consumption.
16. Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.
17. The licensee shall not acquire licensed material in a sealed source or device that contains a sealed source unless the source or device has been registered with the U. S. Nuclear Regulatory Commission under 10 CFR 32.210 or with an Agreement State.
18. The licensee is authorized to transport licensed material only in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."
19. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U. S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.
  - A. Application dated June 24, 2011 (excluding Radiation Safety Manual dated June 2011) (ML111800523)
  - B. Letter dated August 29, 2011 (ML112710652)
  - C. Letter dated October 24, 2011 (ML112991648)
  - D. Letter dated November 1, 2011 (with attached letter dated November 1, 2011) (ML113191349)
  - E. Letter dated November 21, 2011 (excluding Radiation Safety Manual dated November 2011) (ML113320459)
  - F. Letter received May 10, 2013 (ML13135A641)
  - G. Letter received July 26, 2013 (ML13207A404)
  - H. Letter dated January 28, 2014 (ML14035A331)
  - I. Letter dated March 21, 2014 (ML14094A231)
  - J. Letter dated June 13, 2014 (re: RSO Delegation of Authority) (ML14171A336)
  - K. **Letter dated July 9, 2015 (ML15191A367)**
  - L. **Letter dated August 17, 2015 (ML15267A263)**

FOR THE U. S. NUCLEAR REGULATORY COMMISSION

Date OCT 01 2015

By

  
Bryan A. Parker  
Materials Licensing Branch  
Region III